Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

Claim 1 (Currently Amended):   A method of generating outputs in response to real world stimulation comprising:

capturing two or more simultaneous ~~concurrent~~ inputs that are responsive to training stimulation;

synthesizing the captured inputs;

generating a model representation of the synthesized inputs;

storing the generated ~~a~~ model ~~representing a synthesis of the captured inputs~~; and

using the stored model to generate outputs in response to real-world stimulation.

Claim 2 (Original):   The method according to claim 1, further comprising:

using a forced choice interaction to generate one or more additional inputs;

capturing the additional inputs; and

incorporating the additional inputs into the model.

Claim 3 (Original):   The method according to claim 1, wherein the model comprises a worldline of linked object diagram exemplars in an N-dimensional space.

Claim 4 (Currently Amended):   The method according to claim 1, wherein

the real world stimulation comprises <u>simultaneous</u> ~~concurrent~~ inputs that are compared to the stored model, and

the outputs are based on the results of the comparison.

Claim 5 (Original):   A computer readable medium for storing computer-executable instructions for performing the method of claim 1.

Claim 6 (Original):   A hardware processing engine configured to perform the method of claim 1.

Claim 7 (Original):   An application specific integrated circuit configured to perform the method of claim 1.

Claim 8 (Original):   A net list integrated into other integrated circuits to perform the method of claim 1.

Claim 9 (Currently Amended):   A method of generating outputs in response to control command stimulation comprising:

capturing <u>two or more simultaneous</u> ~~concurrent~~ inputs that are responsive to training stimulation;

<u>synthesizing the captured inputs;</u>

<u>generating a model representation of the synthesized inputs;</u>

storing <u>the generated</u> a model ~~representing a synthesis of the captured inputs~~; and

using the stored model to generate outputs in response to control command stimulation.

Claim 10 (Original):   The method according to claim 9, further comprising:

using forced choice interaction to generate one or more additional inputs;

capturing the additional inputs; and

incorporating the additional inputs into the model.

Claim 11 (Original):   The method according to claim 9, wherein the model comprises a worldline of linked object diagram exemplars in an N-dimensional space.

Claim 12 (Currently Amended):   The method according to claim 9, wherein

the real world stimulation comprises simultaneous ~~concurrent~~ inputs that are compared to the stored model, and

the outputs are based on the results of the comparison.

Claim 13 (Original):   A computer readable medium for storing computer-executable instructions for performing the method of claim 9.

Claim 14 (Original):   A hardware processing engine configured to perform the method of claim 9.

Claim 15 (Original):   An application specific integrated circuit configured to perform the method of claim 9.

Claim 16 (Original):   A net list integrated into other integrated circuits to perform the method of claim 9.

Claim 17 (Currently Amended):   A system for generating an outputs in response to real world stimulation comprising:

input capture circuitry that captures two or more simultaneous ~~concurrent~~ system inputs that are responsive to training stimulation;

processing circuitry for synthesizing the captured inputs and generating a model representation of the synthesized inputs; and

a memory that stores the generated ~~a~~ model ~~representing a synthesis of the captured inputs~~; and

an output generator that uses the stored model to generate outputs in response to real world stimulation.

Claim 18 (Original):   The system according to claim 17, wherein the input capture circuitry further captures one or more additional inputs generated from a forced choice interaction and the additional inputs are incorporated into the model.

Claim 19 (Currently Amended):   The system ~~method~~ according to claim 17, wherein the model comprises a worldline of linked object diagram exemplars in an N-dimensional space.

Claim 20 (Currently Amended):   The system according to claim 17, wherein the real world stimulation comprises simultaneous ~~concurrent~~ inputs that are compared to the stored model, and the outputs are based on the results of the comparison.

Claim 21 (Original): The system according to claim 17, wherein at least part of said system is implemented in a computer software program.

Claim 22 (Original): The system according to claim 17, wherein at least part of said system is implemented as a hardware processing engine.

Claim 23 (Original): The system according to claim 17, wherein at least part of said system is implemented as an application specific integrated circuit.

Claim 24 (Original): The system according to claim 17, wherein at least part of said system is implemented as a net list integrated into other integrated circuits.

Claim 25 (Currently Amended): A system for generating an output in response to control command stimulation comprising:

input capture circuitry that captures two or more simultaneous ~~concurrent~~ system inputs that are responsive to training stimulation;

processing circuitry for synthesizing the captured inputs and generating a model representation of the synthesized inputs; and

a memory that stores the generated a model ~~representing a synthesis of the captured inputs~~; and

an output generator that uses the stored model to generate outputs in response to control command stimulation.

Claim 26 (Original): The system according to claim 25, wherein the input capture circuitry further captures one or more additional inputs generated from a forced choice interaction and the additional inputs are incorporated into the model.

Claim 27 (Currently Amended): The system ~~method~~ according to claim 25, wherein the model comprises a worldline of linked object diagram exemplars in an N-dimensional space.

Claim 28 (Currently Amended): The system according to claim 25, wherein the real world stimulation comprises simultaneous ~~concurrent~~ inputs that are compared to the stored model, and the outputs are based on the results of the comparison.

Claim 29 (Original): The system according to claim 25, wherein at least part of said system is implemented in a computer software program.

Claim 30 (Original): The system according to claim 25, wherein at least part of said system is implemented as a hardware processing engine.

Claim 31 (Original): The system according to claim 25, wherein at least part of said system is implemented as an application specific integrated circuit.

Claim 32 (Original): The system according to claim 25, wherein at least part of said system is implemented as a net list integrated into other integrated circuits.

Claim 33 (New): A method of generating outputs in response to real world stimulation comprising:

capturing two or more simultaneous user inputs that are responsive to training stimulation;

synthesizing the captured inputs through a dynamic, model-based response generation from the captured inputs with correlated congruence to two or more data input channels;

storing the model representation of the synthesis generation as mapped into an N-dimensional representation; and

using the stored model to generate outputs in response to real world stimulation through temporally sensitive similarity matching.

Claim 34 (New): The method according to claim 33, further comprising:

using a forced choice interaction of dynamic temporal events to generate one or more additional simultaneous user inputs, which are physically/mentally linked pattern responses;

capturing the additional user inputs; and

incorporating the additional user inputs into the model.

Claim 35 (New): A method of generating outputs in response to real world stimulation comprising:

receiving two or more simultaneous inputs supplied by a user in response to training stimulation;

generating an N-dimensional object space representing a synthesis of the simultaneous user inputs, wherein the object space comprises a plurality of objects and object links between the objects;

mapping the N-dimensional object space to one or more M-dimensional sub-spaces to compare the object space representing the synthesis of the simultaneous user inputs to subsequently received simultaneous user inputs; and

generating outputs in response to the comparing.

Claim 36 (New): The method according to claim 35, wherein the objects in the object space include objects of two or more different object classes.

Claim 37 (New):   The method according to claim 36, wherein the object links comprise worldlines each connecting the objects of a respective one of the different classes.

Claim 38 (New):   The method according to claim 36, wherein the different object classes correspond to different user training sessions.

Claim 39 (New):   The method according to claim 35, wherein the object space is at least partially orthogonal.

Claim 40 (New):   The method according to claim 35, wherein $N>3$.

Claim 41 (New):   The method according to claim 35, wherein the N-dimensional space is mapped to the one or more M-dimensional sub-spaces using subspace projection operators.

Claim 42 (New):   The method according to claim 41, wherein the subspace projection operators project densities to the M-dimensional space.

Claim 43 (New):   The method according to claim 42, wherein the subspace projection operators project the densities onto axes of the object space model.

Claim 44 (New):   The method according to claim 42, wherein the subspace projection operators include subspace projection operators for obtaining attribute densities.

Claim 45 (New):   The method according to claim 42, wherein the subspace projection operators include subspace projection operators for obtaining object link densities.

Claim 46 (New):   The method according to claim 35, wherein the object links

comprise a worldline connecting the objects.

Claim 47 (New):   The method according to claim 35, wherein the subsequently received simultaneous user inputs are provided in response to a forced choice interaction with the user.

Claim 48 (New):   A storage medium storing executable instructions for performing the method of claim 35.

Claim 49 (New):   A hardware processing engine configured to perform the method of claim 35.

Claim 50 (New):   An application specific integrated circuit configured to perform the method of claim 35.

Claim 51 (New):   A net list integrated into other integrated circuits to perform the method of claim 35.

Claim 52 (New):   A system for generating outputs in response to real world stimulation comprising:

inputs for receiving two or more simultaneous inputs supplied by a user in response to training stimulation;

storage for storing an N-dimensional object space representing a synthesis of the simultaneous user inputs, wherein the object space comprises a plurality of objects and object links between the objects;

a processing system for mapping the N-dimensional object space to one or more M-dimensional sub-spaces to compare the object space representing the synthesis of the simultaneous user inputs to subsequently received simultaneous user inputs; and

outputs for outputting outputs based on the comparing.